Commonwealth of Kentucky
Division for Air Quality

PERMIT STATEMENT OF BASIS

FINAL
Conditional Major, Construction / Operating
Permit: F-06-009 R2
Marathon Petroleum Company
Lexington, KY.
January 31, 2009
Luis D. Fuentes, Reviewer

SOURCE ID:	21-067-00031
AGENCY INTEREST:	1076
ACTIVITY:	APE20080002

MINOR PERMIT REVISION (F-06-009 R2)

Marathon is planning to convert tank 821 from an existing ethanol tank to a gasoline additive tank. The additive will be injected/ blended with gasoline at the loading rack. As the result, just 0.10 tons per year of VOC and 0.0051 tons per year of HAP will be emitted.
The change will result in the storage tank moving from Section B- Emission Points, Emission Units, Applicable Regulation, and Operation Conditions, of the permit to Section C- insignificant Activities of the permit.

SOURCE DESCRIPTION

Marathon owns and operates a terminal in Lexington, Kentucky. The terminal receives product by pipeline, stores the product in tanks, and then loads the product to tank trucks for distribution. The terminal is currently permitted under Kentucky air operating permit F-06-009 R1, which was revised on October, 2008) The permitted points are tank truck loading racks, storage tanks, and terminal fugitive equipment. Emissions from this terminal are limited by the permittee to attain conditional major status.

The Lexington Terminal is a bulk storage facility that receives gasoline, fuel oil, and kerosene by pipeline and stores the products in above ground storage tanks (note that jet fuel is considered a subset of kerosene). Occasionally, a tank truck loaded with gasoline or other product may be returned and off-loaded into a storage tank. However, this is not a routine operation. Ethanol, additives, and diesel dye are received by tanker truck and are injected into the product at the loading racks. All products are shipped out by tank trucks, which are loaded at the loading racks. The facility also has small oil-water separators, a crock used to hold petroleum contact water before it is sent off-site for reclamation, and other miscellaneous equipment.

A vapor recovery unit (VRU) is the primary control for truck-loading emissions. Vapors vented during loading are adsorbed onto an activated carbon bed. When the bed becomes saturated, it is regenerated. Regeneration is achieved by absorbing the recovered gasoline vapors off of the beds with liquid gasoline. The VRU has two beds. One carbon bed removes gasoline vapors while the other bed is being regenerated. After a period of time, the beds will switch.

On occasion the VRU may need to be down for maintenance. Because emissions control is required

by 40 CFR 60 Subpart XX, Marathon has the ability to use backup control devices in order to eliminate long term interruptions of terminal loading operations. The Lexington Terminal has two types of backup emission controls. The first is using the VRU at the nearby Chevron terminal. Chevron's VRU is also used to comply with Subpart XX, so Marathon and Chevron have an agreement to be able to use each other's VRU if needed. The second backup emission control is a portable vapor destruction units (VDU) owned by Marathon. Marathon owns several of these portable oxidizers, which are regularly tested and maintained by the company for use as backup emission controls at their terminals. The September 9, 2005 letter from Marathon to the Division included documentation that these units will also meet the Subpart XX control requirements.

Marathon submitted construction application for installation of Tank 835 on May 1, 2006. The tank (Tank 835) is a 462,000 gallon capacity internal floating roof tank. While primarily intended for ethanol storage, the tank is capable of storing gasoline, diesel, distillate, and kerosene. The addition of this tank does not affect the terminal's gasoline throughput capacity, which is a function of market demand and pipeline capacity. Marathon also requested that this revision be considered additional information for the Conditional Major renewal application, and that the tank was included in the renewed Conditional Major permit, F-06-009.

On July 30, 2008, Marathon submitted an application for installing a new 100-gallon distillate (Kerosene/Jet fuel) additive tank which included some piping and 2 new pumps. As a result, a minor permit revision was issued under F-06-099 R1.

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COMMENTS:
Potential emission from the new additive tank will be less than 5 tons per year VOC and less than 5 tons per year combined HAP, and the tank will not be subject to a federally- enforceable requirement other than the generally applicable requirement to calculate monthly emission rates. Therefore, the tank will be considered an insignificant activity under 401 KAR 52:030 Section 6(1).
The project will not be subject to review under 401 KAR 51:052, Review of New Sources in or Impacting upon Non-Attainment Areas, since the VOC emissions will be less than 40 tons per year PSD significant level for this pollutant.

Non-Applicable Regulations:

40 CFR 60 Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*, will not apply because the tank capacity will be less than 19,800 gallons.

401 KAR 59:050, *New storage vessels for petroleum liquids*, will not apply because the tank capacity will be less than 10,567 gallons.

EMISSION AND OPERATING CAPS DESCRIPTION:

In order to ensure that the terminal remains exempt from the regulations to major sources of criteria and hazardous air pollutant (HAP) emissions, including the Gasoline Distribution MACT (40 CFR 63 Subpart R), Marathon has a Conditional Major permit. Terminal emissions are limited to less than 90 ton/yr volatile organic compounds (VOC), 22.5 ton/yr total HAP, and 9 ton/yr individual HAP. Monthly and rolling 12-month total emissions will be calculated. Emission calculations and supporting documentation will be retained at the terminal.

PERIODIC MONITORING:

See the permit for Specific Monitoring Requirements.

OPERATIONAL FLEXIBILITY:

The source is not restricted as to hours of operation or quantity of product produced while remaining within the caps above.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.